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Claims

1. A method for detecting at least one emergent concept among a plurality of sites comprising the steps of:

creating at least one adjacency matrix A, said adjacency matrix having a plurality of entries, $A_{i,j}$ wherein:

i and j are among said plurality of sites;

 $A_{i,i} = r$

if said sites, i, j are connected;

 $A_{ij} = 0$

otherwise; and

r

is a positive number;

computing the transpose matrix A^T of said adjacency matrix A; computing the *nth* eigenvector $X^{(n)}$ of a matrix product of said transpose matrix and said adjacency matrix, $A^T A$ for determining an authority value of said plurality of sites, wherein n is a natural number.

2. A method for detecting at least one emergent concept among a plurality of sites as in claim 1 comprising the step of:

computing the *nth* eigenvector $Y^{(n)}$ of a matrix product of said adjacency matrix and said transpose matrix, $A A^{T}$ for determining a hub value of said plurality of sites.

- 3. A method for detecting at least one emergent concept among a plurality of sites as in claim 1 wherein said positive number r represents the strength of said connection between said sites.
- 4. A method for detecting at least one emergent concept among a plurality of sites as in claim 1 wherein said natural number n is one.
- 5. A method for detecting at least one emergent concept among a plurality of sites as in claim 4 wherein said *nth* eigenvector $X^{(n)}$ is a principal eigenvector of said product $A^T A$.
- 6. A method for detecting at least one emergent concept among a plurality of sites as in claim 4 wherein said *nth* eigenvector $Y^{(n)}$ is a principal eigenvector of said product AA^{T} .

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- A method for detecting at least one emergent concept among a plurality of sites as in claim 1 wherein said natural number n is greater than one.
- A method for detecting at least one emergent concept among a plurality of sites as in claim 1 wherein said *nth* eigenvector $X^{(n)}$ is a principal eigenvector of said product $A^T A$.
- A method for detecting at least one emergent concept among a 10 plurality of sites as in claim 1 wherein said *nth* eigenvector $Y^{(n)}$ is a principal eigenvector of said product $A^T A$.
- Computer executable software code stored on a computer readable 10. medium, the code for detecting at least one emergent concept among a plurality of sites, the ¹⁵ code comprising:

code to create at least one adjacency matrix A, said adjacency matrix having a plurality of entries, $A_{i,j}$ wherein:

i and j are among said plurality of sites;

if said sites, *i*,/*j* are connected;

 $A_{ij} = 0$

otherwise; and

is a positive number;

code to compute the transpose matrix A^T of said adjacency matrix A; and code to compute the nth eigenvector of a matrix product of said transpose matrix and said adjacency matrix, A^T After determining an authority value of said plurality of sites, wherein n is a natural number.

- Computer executable software code stored on a computer readable 11. medium, the code for detecting at least one emergent concept among a plurality of sites as in claim 10, the code further comprising: 30
 - code to compute the n/h eigenvector $Y^{(n)}$ of a matrix product of said adjacency matrix and said transpose/matrix, A A^T for determining a hub value of said plurality of sites.
- 12. A programmed computer system for detecting at least one emergent concept among a plurality of sites comprising at least one memory having at least one

region storing computer executable program code and at least/one processor for executing the program code stored in said memory, wherein the program code includes:

code to create at least one adjacency matrix A, said adjacency matrix having a plurality of entries, $A_{i,i}$ wherein:

i and j are among said plurality of sites;

 $A_{i,i} = r$

if said sites, i, j are connected;

 $A_{i,j} = 0$

otherwise; and

is a positive number;

code to compute the transpose matrix A^{T} of said adjacency matrix A; and code to compute the nth eigenvector X⁽ⁿ⁾ of a matrix product of said 10 transpose matrix and said adjacency matrix, A^{T} A for determining an authority value of said plurality of sites, wherein n is a natural number.

A programmed computer system for detecting at least one emergent 13. 15 concept among a plurality of sites comprising at least one memory having at least one region storing computer executable program code and at least one processor for executing the program code stored in said memory as in claim 12, wherein the program code further includes:

code to compute the *nth* eigenvector $Y^{(n)}$ of a matrix product of said adjacency matrix and said transpose matrix, $A A^{T}$ for determining a hub value of said plurality of sités.

Add B1

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